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STIC-ERIC1600/2900

From: Brooks, Kristie L.  
 Sent: Tuesday, June 23, 2009 4:53 PM  
 To: STIC-ERIC1600/2900  
 Subject: Stic Search 10563803

Kristie L.  
 10563803 SS d

\*\*Please see attached\*\*

Kristie L. Brooks  
 Patent Examiner  
 TC 1600, REM 4C35  
 571-272-3072  
 Kristie.Brooks@USPTO.gov

## INVENTOR SEARCH

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L9 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2005:54985 HCAPLUS Full-text  
 DOCUMENT NUMBER: 142:129081  
 TITLE: Use of oxaspirodecenyl butanoate derivative  
 as acaricide  
 INVENTOR(S): Fischer, Reiner; Brueck, Ernst  
 PATENT ASSIGNEE(S): Bayer Cropscience Aktiengesellschaft, Germany  
 SOURCE: PCT Int. Appl., 16 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005004605	A1	20050120	WO 2004-EP7225	20040702
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				

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 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
 EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,  
 SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,  
 SN, TD, TG

DE 10331674	A1	20050210	DE 2003-10331674	20030714
AU 2004255427	A1	20050120	AU 2004-255427	20040702
EP 1648231	A1	20060426	EP 2004-740580	20040702
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CN 1822766	A	20060823	CN 2004-80020075	20040702
BR 2004012586	A	20060919	BR 2004-12586	20040702
CN 101103722	A	20080116	CN 2007-10140727	20040702
JP 2009513540	T	20090402	JP 2006-519802	20040702
KR 2006037334	A	20060503	KR 2006-700577	20060110
IN 2006CN00145	A	20070629	IN 2006-CN145	20060112
MX 2006000521	A	20060330	MX 2006-521	20060113
NO 2006000351	A	20060123	NO 2006-351	20060123
US 20070015825	A1	20070118	US 2006-563803	20060628

## PRIORITY APPLN. INFO.:

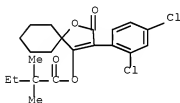
DE 2003-10331674	A	20030714
CN 2004-80020075	A3	20040702
WO 2004-EP7225	W	20040702

AB 2,2-Dimethyl-3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro [4.5]dec-3-en-4-yl butanoate (I) is useful for controlling acarids in hops, kiwi, berries, nuts, coffee, tropical fruits, spices and conifers. Thus, I (240 SC) at 0.0048%/ha, 21 days after treatment, was 93% effective (according to Abbott) in controlling Tetranychus urticae in hops.

IT 148477-71-8  
 RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)  
 (as acaricide for use on hops, fruits and nuts, coffee, spices, and conifers)

RN 148477-71-8 HCAPLUS

CN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)

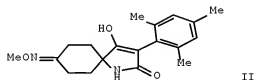
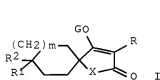


REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2009 ACS ON STN  
 ACCESSION NUMBER: 1999:228062 HCAPLUS Full-text  
 DOCUMENT NUMBER: 130:252239  
 TITLE: Spirocyclic phenyl keto enols with insecticidal and acaricidal activity  
 INVENTOR(S): Fischer, Reiner; Bretschneider, Thomas;  
 Erdelen, Christoph; Wachendorff-Neumann, Ulrike;  
 Dollinger, Markus; Turberg, Andreas  
 PATENT ASSIGNEE(S): Bayer A.-G., Germany

SOURCE: Ger. Offen., 64 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19742492	A1	19990401	DE 1997-19742492	19970926
WO 9916748	A1	19990408	WO 1998-EP5809	19980912
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9897431	A	19990423	AU 1998-97431	19980912
EP 1017674	A1	20000712	EP 1998-951386	19980912
EP 1017674	B1	20090218		
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL				
BR 9812535	A	20000725	BR 1998-12535	19980912
TR 200000749	T2	20000821	TR 2000-749	19980912
JP 2001518464	T	20011016	JP 2000-513834	19980912
CN 1217931	C	20050907	CN 1998-809557	19980912
AT 423097	T	20090315	AT 1998-951386	19980912
TW 568904	B	20040101	TW 1998-87115725	19980922
ZA 9808784	A	19990331	ZA 1998-8784	19980925
US 6589976	B1	20030708	US 2000-509288	20000321
MX 2000002937	A	20010306	MX 2000-2937	20000324
IN 2001DE00832	A	20050311	IN 2001-DE832	20010806
PRIORITY APPLN. INFO.:			DE 1997-19742492	A 19970926
			WO 1998-EP5809	W 19980912
OTHER SOURCE(S):			MARPAT 130:252239	
GI				



AB Keto enols I [X = NH, O, S; R = (un)substituted Ph; G = H, acyl, alkoxycarbonyl, substituted sulfonyl, phosphoryl, carbamoyl; R1 = OH, R2 = H; R1 = R2 = alkoxy; R1R2 = O, (un)substituted NH, NOH, NNH2; m = 0, 1] were prepared for use as insecticides, acaricides, and herbicides. Thus, 4-hydroxycyclohexanone was converted to the O-methyloxime, the hydroxyl group oxidized and the cyclohexanedione mono-O-methyloxime treated with NH4OH and KCN to give 4-amino-4-cyanocyclohexanone O-methyloxime. This latter compound was treated with 2,4,6-Me3C6H2CH2COC1, the cyano group hydrolyzed, and cyclized to give the lactam II. At 0.1% II gave 100% control of Myzus persicae on cabbage.

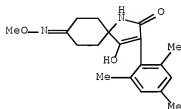
IT 221526-90-5P 221526-93-8P 221526-96-1P  
 221526-97-2P 221526-98-3P 221526-99-4P

221527-00-0P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(preparation of spirocyclic Ph keto enols with insecticidal and acaricidal activity)

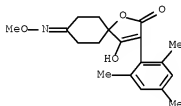
RN 221526-90-5 HCAPLUS

CN 1-Azaspiro[4.5]dec-3-ene-2,8-dione, 4-hydroxy-3-(2,4,6-trimethylphenyl)-, 8-(O-methyloxime) (CA INDEX NAME)



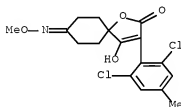
RN 221526-93-8 HCAPLUS

CN 1-Oxaspiro[4.5]dec-3-ene-2,8-dione, 4-hydroxy-3-(2,4,6-trimethylphenyl)-, 8-(O-methyloxime) (CA INDEX NAME)



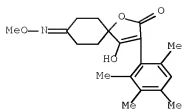
RN 221526-96-1 HCAPLUS

CN 1-Oxaspiro[4.5]dec-3-ene-2,8-dione, 3-(2,6-dichloro-4-methylphenyl)-4-hydroxy-, 8-(O-methyloxime) (CA INDEX NAME)



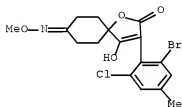
RN 221526-97-2 HCAPLUS

CN 1-Oxaspiro[4.5]dec-3-ene-2,8-dione, 4-hydroxy-3-(2,3,4,6-tetramethylphenyl)-, 8-(O-methyloxime) (CA INDEX NAME)



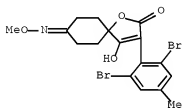
RN 221526-98-3 HCAPLUS

CN 1-Oxaspiro[4.5]dec-3-ene-2,8-dione,  
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INDEX NAME)



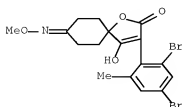
RN 221526-99-4 HCAPLUS

CN 1-Oxaspiro[4.5]dec-3-ene-2,8-dione,  
3-(2,6-dibromo-4-methylphenyl)-4-hydroxy-, 8-(O-methyloxime) (CA INDEX  
NAME)



RN 221527-00-0 HCAPLUS

CN 1-Oxaspiro[4.5]dec-3-ene-2,8-dione,  
3-(2,4-dibromo-6-methylphenyl)-4-hydroxy-, 8-(O-methyloxime) (CA INDEX  
NAME)

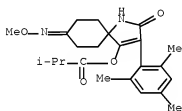


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 221527-12-4P 221527-13-5P 221527-18-0P  
 221527-19-1P 221527-20-4P 221527-21-5P  
 221527-22-6P 221527-23-7P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of spirocyclic Ph keto enols with insecticidal and acaricidal activity)

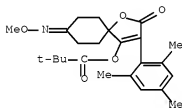
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CN Propanoic acid, 2-methyl-, 8-(methoxyimino)-2-oxo-3-(2,4,6-trimethylphenyl)-1-azaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)



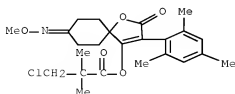
RN 221527-03-3 HCAPLUS

CN Propanoic acid, 2,2-dimethyl-, 8-(methoxyimino)-2-oxo-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)



RN 221527-04-4 HCAPLUS

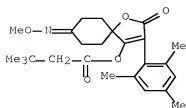
CN Propanoic acid, 3-chloro-2,2-dimethyl-, 8-(methoxyimino)-2-oxo-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)



RN 221527-05-5 HCAPLUS

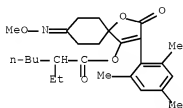
CN Butanoic acid, 3,3-dimethyl-, 8-(methoxyimino)-2-oxo-3-(2,4,6-

trimethylphenyl)-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)



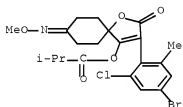
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CN Hexanoic acid, 2-ethyl-, 8-(methoxyimino)-2-oxo-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)



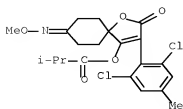
RN 221527-08-8 HCAPLUS

CN Propanoic acid, 2-methyl-, 3-(4-bromo-2-chloro-6-methylphenyl)-8-(methoxyimino)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)



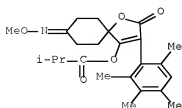
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CN Propanoic acid, 2-methyl-, 3-(2,6-dichloro-4-methylphenyl)-8-(methoxyimino)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)



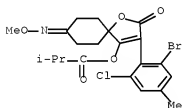
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CN Propanoic acid, 2-methyl-, 8-(methoxyimino)-2-oxo-3-(2,3,4,6-tetramethylphenyl)-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)



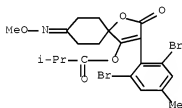
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CN Propanoic acid, 2-methyl-, 3-(2-bromo-6-chloro-4-methylphenyl)-8-(methoxyimino)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)



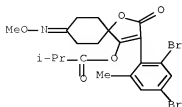
RN 221527-12-4 HCAPLUS

CN Propanoic acid, 2-methyl-, 3-(2,6-dibromo-4-methylphenyl)-8-(methoxyimino)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)



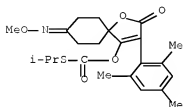
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CN Propanoic acid, 2-methyl-, 3-(2,4-dibromo-6-methylphenyl)-8-(methoxyimino)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)

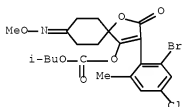




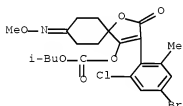
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 CN Carbonothioic acid, O-[8-(methoxyimino)-2-oxo-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.5]dec-3-en-4-yl] S-(1-methylethyl) ester (CA INDEX NAME)



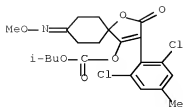
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 CN Carbonic acid, 3-(4-bromo-2-chloro-6-methylphenyl)-8-(methoxyimino)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl 2-methylpropyl ester (CA INDEX NAME)

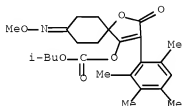


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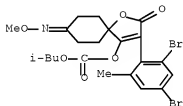
RN 221527-22-6 HCAPLUS

CN Carbonic acid, 8-(methoxyimino)-2-oxo-3-(2,3,4,6-tetramethylphenyl)-1-oxaspiro[4.5]dec-3-en-4-yl 2-methylpropyl ester (CA INDEX NAME)



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CN Carbonic acid, 3-(2,4-dibromo-6-methylphenyl)-8-(methoxyimino)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl 2-methylpropyl ester (CA INDEX NAME)



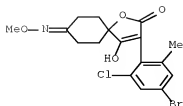
IT 221526-95-0P 221527-01-1P

RL: AGR (Agricultural use); RCT (Reactant); SPN (Synthetic preparation);  
 BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent);  
 USES (Uses)

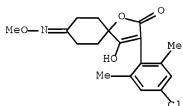
(preparation of spirocyclic Ph keto enols with insecticidal and acaricidal activity)

RN 221526-95-0 HCAPLUS

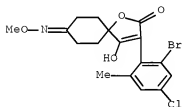
CN 1-Oxaspiro[4.5]dec-3-ene-2,8-dione,  
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 INDEX NAME)



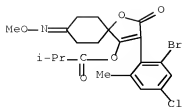
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 3-(4-chloro-2,6-dimethylphenyl)-4-hydroxy-, 8-(O-methyloxime) (CA INDEX  
 NAME)



IT 221526-94-9P 221527-07-7P 221527-14-6P  
 221527-15-7P 221527-16-8P 221527-24-8P  
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 RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL (Biological  
 study); PREP (Preparation); USES (Uses)  
 (preparation of spirocyclic Ph keto enols with insecticidal and acaricidal  
 activity)  
 RN 221526-94-9 HCAPLUS  
 CN 1-Oxaspiro[4.5]dec-3-ene-2,8-dione,  
 3-(2-bromo-4-chloro-6-methylphenyl)-4-hydroxy-, 8-(O-methyloxime) (CA  
 INDEX NAME)

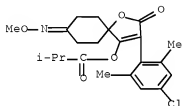


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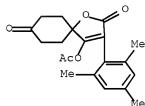
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CN Propanoic acid, 2-methyl-, 3-(4-chloro-2,6-dimethylphenyl)-8-(methoxyimino)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)



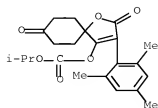
RN 221527-15-7 HCAPLUS

CN 1-Oxaspiro[4.5]dec-3-ene-2,8-dione, 4-(acetyloxy)-3-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



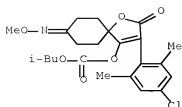
RN 221527-16-8 HCAPLUS

CN Carbonic acid, 2,8-dioxo-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.5]dec-3-en-4-yl 1-methylethyl ester (CA INDEX NAME)



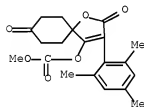
RN 221527-24-8 HCAPLUS

CN Carbonic acid, 3-(4-chloro-2,6-dimethylphenyl)-8-(methoxyimino)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl 2-methylpropyl ester (CA INDEX NAME)



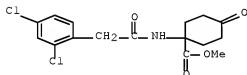
RN 221527-25-9 HCAPLUS

CN Carbonic acid, 2,8-dioxo-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.5]dec-3-en-4-yl methyl ester (CA INDEX NAME)



RN 221527-27-1 HCAPLUS

CN Cyclohexanecarboxylic acid, 1-[[2-(2,4-dichlorophenyl)acetyl]amino]-4-oxo-, methyl ester (CA INDEX NAME)

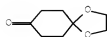


IT 4746-97-8, 1,4-Cyclohexanedione monoethyleneketal  
13482-22-9, 4-Hydroxycyclohexanone 52629-46-6,  
2,4,6-Trimethylphenylacetyl chloride 53056-20-5, 2,4-  
Dichlorophenylacetyl chloride

RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation of spirocyclic Ph keto enols with insecticidal and acaricidal activity)

RN 4746-97-8 HCAPLUS

CN 1,4-Dioxaspiro[4.5]decan-8-one (CA INDEX NAME)



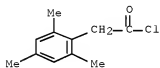
RN 13482-22-9 HCAPLUS

CN Cyclohexanone, 4-hydroxy- (CA INDEX NAME)



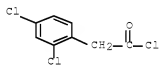
RN 52629-46-6 HCAPLUS

CN Benzeneacetyl chloride, 2,4,6-trimethyl- (CA INDEX NAME)



RN 53056-20-5 HCAPLUS

CN Benzeneacetyl chloride, 2,4-dichloro- (CA INDEX NAME)



IT 193805-67-3P 221526-92-7P 221527-02-2P

221527-26-0P 221527-28-2P 221527-29-3P

221527-30-6P 221527-31-7P 221527-32-8P

221527-33-9P 221527-34-0P 221527-35-1P

221527-36-2P 221527-37-3P 221527-38-4P

221527-39-5P 221527-40-8P 221527-41-9P

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221527-45-3P 221527-46-4P 221527-47-5P

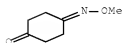
221527-48-6P 221527-49-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of spirocyclic Ph keto enols with insecticidal and acaricidal activity)

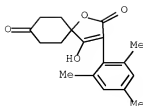
RN 193805-67-3 HCAPLUS

CN 1,4-Cyclohexanedione, 1-(O-methoxyimino) (CA INDEX NAME)



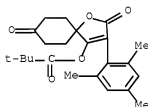
RN 221526-92-7 HCAPLUS

CN 1-Oxaspiro[4.5]dec-3-ene-2,8-dione, 4-hydroxy-3-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



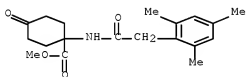
RN 221527-02-2 HCAPLUS

CN Propanoic acid, 2,2-dimethyl-, 2,8-dioxo-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)



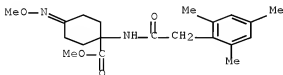
RN 221527-26-0 HCAPLUS

CN Cyclohexanecarboxylic acid, 4-oxo-1-[[2-(2,4,6-trimethylphenyl)acetyl]amino]-, methyl ester (CA INDEX NAME)



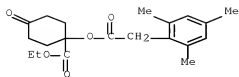
RN 221527-28-2 HCAPLUS

CN Cyclohexanecarboxylic acid, 4-(methoxyimino)-1-[[2-(2,4,6-trimethylphenyl)acetyl]amino]-, methyl ester (CA INDEX NAME)



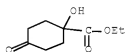
RN 221527-29-3 HCAPLUS

CN Benzeneacetic acid, 2,4,6-trimethyl-, 1-(ethoxycarbonyl)-4-oxocyclohexyl ester (CA INDEX NAME)

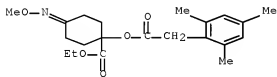


RN 221527-30-6 HCAPLUS

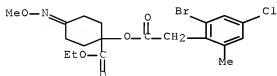
CN Cyclohexanecarboxylic acid, 1-hydroxy-4-oxo-, ethyl ester (CA INDEX NAME)



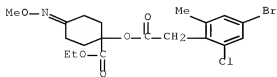
RN 221527-31-7 HCAPLUS

CN Benzeneacetic acid, 2,4,6-trimethyl-,  
1-(ethoxycarbonyl)-4-(methoxyimino)cyclohexyl ester (CA INDEX NAME)

RN 221527-32-8 HCAPLUS

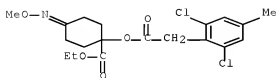
CN Benzeneacetic acid, 2-bromo-4-chloro-6-methyl-,  
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RN 221527-33-9 HCAPLUS

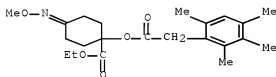
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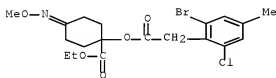
RN 221527-34-0 HCAPLUS

CN Benzeneacetic acid, 2,6-dichloro-4-methyl-,  
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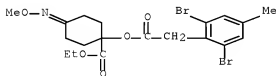
RN 221527-35-1 HCAPLUS

CN Benzeneacetic acid, 2,3,4,6-tetramethyl-,  
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RN 221527-36-2 HCAPLUS

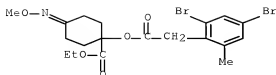
CN Benzeneacetic acid, 2-bromo-6-chloro-4-methyl-,  
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RN 221527-37-3 HCAPLUS

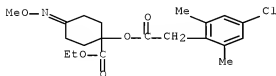
CN Benzeneacetic acid, 2,6-dibromo-4-methyl-,  
1-(ethoxycarbonyl)-4-(methoxyimino)cyclohexyl ester (CA INDEX NAME)

RN 221527-38-4 HCAPLUS

CN Benzeneacetic acid, 2,4-dibromo-6-methyl-,  
1-(ethoxycarbonyl)-4-(methoxyimino)cyclohexyl ester (CA INDEX NAME)

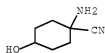


RN 221527-39-5 HCAPLUS

CN Benzeneacetic acid, 4-chloro-2,6-dimethyl-,  
1-(ethoxycarbonyl)-4-(methoxyimino)cyclohexyl ester (CA INDEX NAME)

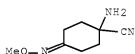
RN 221527-40-8 HCAPLUS

CN Cyclohexanecarbonitrile, 1-amino-4-hydroxy- (CA INDEX NAME)



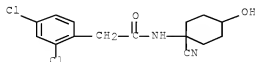
RN 221527-41-9 HCAPLUS

CN Cyclohexanecarbonitrile, 1-amino-4-(methoxyimino)- (CA INDEX NAME)



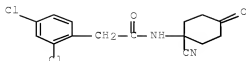
RN 221527-42-0 HCAPLUS

CN Benzeneacetamide, 2,4-dichloro-N-(1-cyano-4-hydroxycyclohexyl)- (CA INDEX NAME)



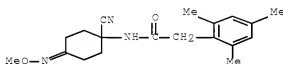
RN 221527-43-1 HCAPLUS

CN Benzeneacetamide, 2,4-dichloro-N-(1-cyano-4-oxocyclohexyl)- (CA INDEX NAME)



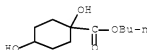
RN 221527-44-2 HCAPLUS

CN Benzeneacetamide, N-[1-cyano-4-(methoxyimino)cyclohexyl]-2,4,6-trimethyl-  
(CA INDEX NAME)



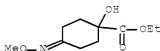
RN 221527-45-3 HCAPLUS

CN Cyclohexanecarboxylic acid, 1,4-dihydroxy-, butyl ester (CA INDEX NAME)



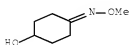
RN 221527-46-4 HCAPLUS

CN Cyclohexanecarboxylic acid, 1-hydroxy-4-(methoxyimino)-, ethyl ester (CA  
INDEX NAME)



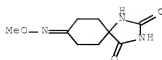
RN 221527-47-5 HCAPLUS

CN Cyclohexanone, 4-hydroxy-, O-methyloxime (CA INDEX NAME)

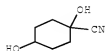


RN 221527-48-6 HCAPLUS

CN 1,3-Diazaspiro[4.5]decane-2,4,8-trione, 8-(O-methyloxime) (CA INDEX NAME)



RN 221527-49-7 HCAPLUS  
 CN Cyclohexanecarbonitrile, 1,4-dihydroxy- (CA INDEX NAME)



L9 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2009 ACS ON STN  
 ACCESSION NUMBER: 1996:194724 HCAPLUS Full-text  
 DOCUMENT NUMBER: 124:231916  
 ORIGINAL REFERENCE NO.: 124:42959a,42962a  
 TITLE: 2-Aryl-1,3-cyclopentanedione Derivatives, Methods for  
 Their Preparation and Their Uses as Pesticides  
 INVENTOR(S): Fischer, Reiner; Dumas, Jacques;  
 Bretschneider, Thomas; Erdelen, Christoph;  
 Wachendorff-Neumann, Ulrike; Santel, Hans-Joachim;  
 Dollinger, Markus; Mencke, Norbert; Turberg, Andreas  
 PATENT ASSIGNEE(S): Bayer A.-G., Germany  
 SOURCE: Ger. Offen., 97 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19518962	A1	19960111	DE 1995-19518962	19950523
WO 9601798	A1	19960125	WO 1995-EP2482	19950626
W: AU, BB, BG, BR, BY, CA, CN, CZ, FI, HU, JP, KR, KZ, LK, MX, NO, NZ, PL, RO, RU, SK, UA, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9529251	A	19960209	AU 1995-29251	19950626
EP 769001	A1	19970423	EP 1995-924938	19950626
EP 769001	B1	20000719		
R: BE, CH, DE, ES, FR, GB, IT, LI, NL				
BR 9508247	A	19971223	BR 1995-8247	19950626
JP 10504537	T	19980506	JP 1996-504079	19950626
JP 3847335	B2	20061122		
EP 987246	A1	20000322	EP 1999-123926	19950626
EP 987246	B1	20040908		
R: BE, CH, DE, ES, FR, GB, IT, LI, NL				
ES 2150575	T3	20001201	ES 1995-924938	19950626
ES 2229614	T3	20050416	ES 1999-123926	19950626
US 5840661	A	19981124	US 1996-765429	19961231
US 6150304	A	20001121	US 1998-131043	19980806

## PRIORITY APPLN. INFO.:

DE 1994-4423943	A1 19940707
DE 1995-19502815	A1 19950130
DE 1995-19518962	A 19950523
EP 1995-924938	A3 19950626
WO 1995-EP2482	W 19950626
US 1996-765429	A3 19961231

OTHER SOURCE(S): CASREACT 124:231916; MARPAT 124:231916

AB The title compds., 2-phenyl-1,3-cyclopentanedione derivs., were prepared; also claimed were the corresponding enones, i.e., 3-hydroxy-2-phenyl-2-cyclopenten-1-one derivs. Many specifically tested compds. were derivs. of spiro[4.5]dec-2-en-1-one. The uses of these compds. as pesticides and herbicides was claimed. An example compound, 2-(2,4-dichlorophenyl)-4-hydroxyspiro[4.5]dec-2-en-1-one was prepared by cyclocondensation of 1-[3-(2,4-dichlorophenyl)-2-oxopropyl]cyclohexanecarboxylic acid Me ester.

IT 174827-99-7P 174828-02-5P 174828-03-6P

174828-15-0P 174828-16-1P 174828-58-1P

174828-59-2P 174828-60-5P

RL: AGR (Agricultural use); BUU (Biological use, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

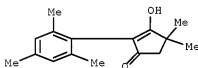
(preparation of (aryl)cyclopentanediones and (aryl)hydroxycyclopentenones

as

pesticides and herbicides)

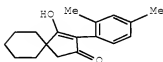
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(CA INDEX NAME)



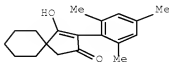
RN 174828-02-5 HCAPLUS

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(CA INDEX NAME)

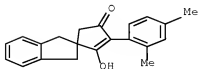


RN 174828-03-6 HCAPLUS

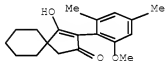
CN Spiro[4.5]dec-3-en-2-one, 4-hydroxy-3-(2,4,6-trimethylphenyl)-  
(CA INDEX NAME)



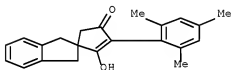
RN 174828-15-0 HCAPLUS  
 CN Spiro[2-cyclopentene-1,2'-[2H]inden]-4-one,  
 3-(2,4-dimethylphenyl)-1',3'-dihydro-2-hydroxy- (CA INDEX NAME)



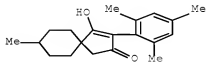
RN 174828-16-1 HCAPLUS  
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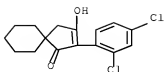
RN 174828-58-1 HCAPLUS  
 CN Spiro[2-cyclopentene-1,2'-[2H]inden]-4-one,  
 1',3'-dihydro-2-hydroxy-3-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



RN 174828-59-2 HCAPLUS  
 CN Spiro[4.5]dec-3-en-2-one, 4-hydroxy-8-methyl-3-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



RN 174828-60-5 HCAPLUS  
 CN Spiro[4.5]dec-2-en-1-one, 2-(2,4-dichlorophenyl)-3-hydroxy- (CA INDEX NAME)



IT 174828-04-7P 174828-05-8P 174828-06-9P  
 174828-07-0P 174828-08-1P 174828-09-2P  
 174828-10-5P 174828-11-6P 174828-12-7P  
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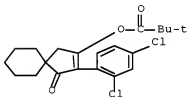
RL: AGR (Agricultural use); BUU (Biological use, unclassified); SPN  
 (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES  
 (Uses)

(preparation of (aryl)cyclopentanediones and (aryl)hydroxycyclopentenones

as pesticides and herbicides)

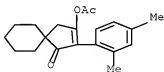
RN 174828-04-7 HCAPLUS

CN Propanoic acid, 2,2-dimethyl-, 2-(2,4-dichlorophenyl)-1-oxospiro[4.5]dec-2-en-3-yl ester (CA INDEX NAME)



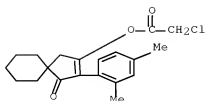
RN 174828-05-8 HCAPLUS

CN Spiro[4.5]dec-2-en-1-one, 3-(acetyloxy)-2-(2,4-dimethylphenyl)- (CA INDEX NAME)



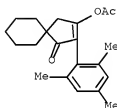
RN 174828-06-9 HCAPLUS

CN Acetic acid, 2-chloro-, 2-(2,4-dimethylphenyl)-1-oxospiro[4.5]dec-2-en-3-yl ester (CA INDEX NAME)



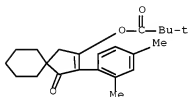
RN 174828-07-0 HCAPLUS

CN Spiro[4.5]dec-2-en-1-one, 3-(acetyloxy)-2-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



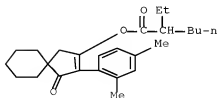
RN 174828-08-1 HCAPLUS

CN Propanoic acid, 2,2-dimethyl-, 2-(2,4-dimethylphenyl)-1-oxospiro[4.5]dec-2-en-3-yl ester (CA INDEX NAME)



RN 174828-09-2 HCAPLUS

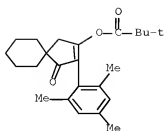
CN Hexanoic acid, 2-ethyl-, 2-(2,4-dimethylphenyl)-1-oxospiro[4.5]dec-2-en-3-yl ester (CA INDEX NAME)



RN 174828-10-5 HCAPLUS

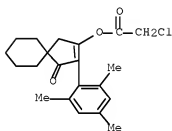
CN Propanoic acid, 2,2-dimethyl-, 1-oxo-2-(2,4,6-trimethylphenyl)spiro[4.5]dec-2-en-3-yl ester (CA INDEX NAME)





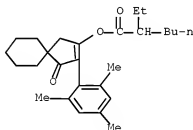
RN 174828-11-6 HCAPLUS

CN Acetic acid, 2-chloro-, 1-oxo-2-(2,4,6-trimethylphenyl)spiro[4.5]dec-2-en-3-yl ester (CA INDEX NAME)



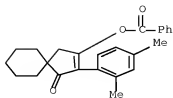
RN 174828-12-7 HCAPLUS

CN Hexanoic acid, 2-ethyl-, 1-oxo-2-(2,4,6-trimethylphenyl)spiro[4.5]dec-2-en-3-yl ester (CA INDEX NAME)



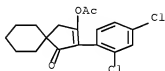
RN 174828-13-8 HCAPLUS

CN Spiro[4.5]dec-2-en-1-one, 3-(benzoyloxy)-2-(2,4-dimethylphenyl)- (CA INDEX NAME)



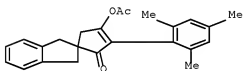
RN 174828-14-9 HCAPLUS

CN Spiro[4.5]dec-2-en-1-one, 3-(acetyloxy)-2-(2,4-dichlorophenyl)- (CA INDEX NAME)



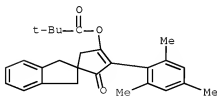
RN 174828-17-2 HCAPLUS

CN Spiro[3-cyclopentene-1,2'-[2H]inden]-2-one, 4-(acetyloxy)-1',3'-dihydro-3-(2,4,6-trimethylphenyl)- (CA INDEX NAME)



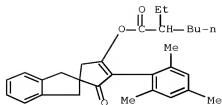
RN 174828-18-3 HCAPLUS

CN Hexanoic acid, 2-ethyl-, 1',3'-dihydro-5-oxo-4-(2,4,6-trimethylphenyl)spiro[3-cyclopentene-1,2'-[2H]inden]-3-yl ester (CA INDEX NAME)



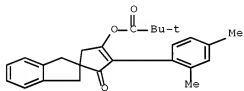
RN 174828-19-4 HCAPLUS

CN Hexanoic acid, 2-ethyl-, 1',3'-dihydro-5-oxo-4-(2,4,6-trimethylphenyl)spiro[3-cyclopentene-1,2'-[2H]inden]-3-yl ester (CA INDEX NAME)



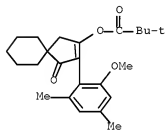
RN 174828-20-7 HCAPLUS

CN Propanoic acid, 2,2-dimethyl-, 4-(2,4-dimethylphenyl)-1',3'-dihydro-5-oxospiro[3-cyclopentene-1,2'-[2H]inden]-3-yl ester (CA INDEX NAME)



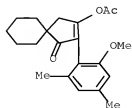
RN 174828-21-8 HCAPLUS

CN Propanoic acid, 2,2-dimethyl-, 2-(2-methoxy-4,6-dimethylphenyl)-1-oxospiro[4.5]dec-2-en-3-yl ester (CA INDEX NAME)



RN 174828-22-9 HCAPLUS

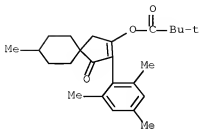
CN Spiro[4.5]dec-2-en-1-one, 3-(acetyloxy)-2-(2-methoxy-4,6-dimethylphenyl)-(CA INDEX NAME)



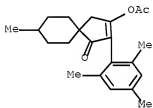
RN 174828-23-0 HCAPLUS

CN Propanoic acid, 2,2-dimethyl-, 8-methyl-1-oxo-2-(2,4,6-

trimethylphenyl)spiro[4.5]dec-2-en-3-yl ester (CA INDEX NAME)

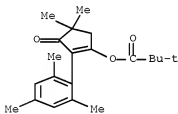


RN 174828-24-1 HCAPLUS

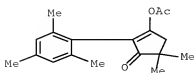
CN Spiro[4.5]dec-2-en-1-one, 3-(acetyloxy)-8-methyl-2-(2,4,6-trimethylphenyl)-  
(CA INDEX NAME)

RN 174828-25-2 HCAPLUS

CN Propanoic acid, 2,2-dimethyl-, 4,4-dimethyl-3-oxo-2-(2,4,6-trimethylphenyl)-1-cyclopenten-1-yl ester (CA INDEX NAME)

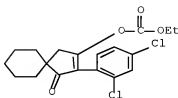


RN 174828-26-3 HCAPLUS

CN 2-Cyclopenten-1-one, 3-(acetyloxy)-5,5-dimethyl-2-(2,4,6-trimethylphenyl)-  
(CA INDEX NAME)

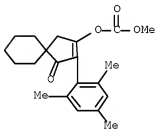
RN 174828-27-4 HCAPLUS

CN Carbonic acid, 3-(2,4-dichlorophenyl)-4-oxospiro[4.5]dec-2-en-2-yl ethyl ester (9CI) (CA INDEX NAME)



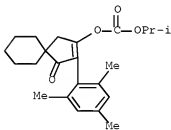
RN 174828-28-5 HCAPLUS

CN Carbonic acid, methyl 4-oxo-3-(2,4,6-trimethylphenyl)spiro[4.5]dec-2-en-2-yl ester (9CI) (CA INDEX NAME)



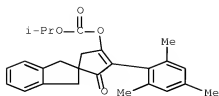
RN 174828-29-6 HCAPLUS

CN Carbonic acid, 1-methylethyl 4-oxo-3-(2,4,6-trimethylphenyl)spiro[4.5]dec-2-en-2-yl ester (9CI) (CA INDEX NAME)



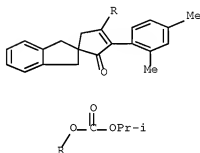
RN 174828-30-9 HCAPLUS

CN Carbonic acid, 1',3'-dihydro-5-oxo-4-(2,4,6-trimethylphenyl)spiro[3-cyclopentene-1,2'-[2H]inden]-3-yl 1-methylethyl ester (CA INDEX NAME)



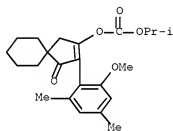
RN 174828-31-0 HCAPLUS

CN Carbonic acid, 4-(2,4-dimethylphenyl)-1',3'-dihydro-5-oxospiro[3-cyclopentene-1,2'-[2H]inden]-3-yl 1-methylethyl ester (CA INDEX NAME)



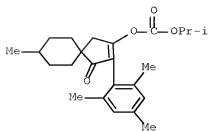
RN 174828-32-1 HCAPLUS

CN Carbonic acid, 3-(2-methoxy-4,6-dimethylphenyl)-4-oxospiro[4.5]dec-2-en-2-yl 1-methylethyl ester (9CI) (CA INDEX NAME)



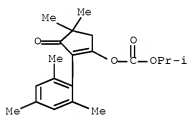
RN 174828-33-2 HCAPLUS

CN Carbonic acid, 1-methylethyl 8-methyl-4-oxo-3-(2,4,6-trimethylphenyl)spiro[4.5]dec-2-en-2-yl ester (9CI) (CA INDEX NAME)



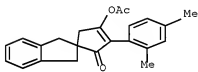
RN 174828-34-3 HCAPLUS

CN Carbonic acid, 4,4-dimethyl-3-oxo-2-(2,4,6-trimethylphenyl)-1-cyclopenten-1-yl 1-methylethyl ester (CA INDEX NAME)



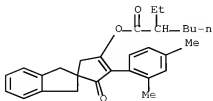
RN 174828-56-9 HCAPLUS

CN Spiro[3-cyclopentene-1,2']-[2H]inden]-2-one, 4-(acetyloxy)-3-(2,4-dimethylphenyl)-1',3'-dihydro- (CA INDEX NAME)



RN 174828-57-0 HCAPLUS

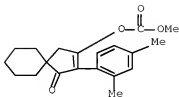
CN Hexanoic acid, 2-ethyl-, 4-(2,4-dimethylphenyl)-1',3'-dihydro-5-oxospiro[3-cyclopentene-1,2']-[2H]inden]-3-yl ester (CA INDEX NAME)



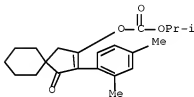
RN 174828-61-6 HCAPLUS

CN Carbonic acid, 3-(2,4-dimethylphenyl)-4-oxospiro[4.5]dec-2-en-2-yl methyl

ester (9CI) (CA INDEX NAME)



RN 174828-62-7 HCAPLUS

CN Carbonic acid, 3-(2,4-dimethylphenyl)-4-oxospiro[4.5]dec-2-en-2-yl  
1-methylethyl ester (9CI) (CA INDEX NAME)

IT 6051-25-8, 2-Oxaspiro[4.5]decane-1,3-dione

41841-19-4 59591-00-3 129752-86-9

174828-01-4

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of (aryl)cyclopentanediones and (aryl)hydroxycyclopentenones

as

pesticides and herbicides)

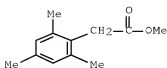
RN 6051-25-8 HCAPLUS

CN 2-Oxaspiro[4.5]decane-1,3-dione (CA INDEX NAME)



RN 41841-19-4 HCAPLUS

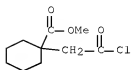
CN Benzenecetic acid, 2,4,6-trimethyl-, methyl ester (CA INDEX NAME)





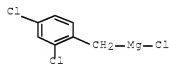
RN 59591-00-3 HCAPLUS

CN Cyclohexanecarboxylic acid, 1-(2-chloro-2-oxoethyl)-, methyl ester (CA INDEX NAME)



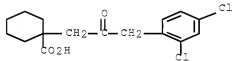
RN 129752-86-9 HCAPLUS

CN Magnesium, chloro[(2,4-dichlorophenyl)methyl]- (9CI) (CA INDEX NAME)



RN 174828-01-4 HCAPLUS

CN Cyclohexanecarboxylic acid, 1-[3-(2,4-dichlorophenyl)-2-oxopropyl]- (CA INDEX NAME)



IT 174828-00-3P 174828-35-4P 174828-36-5P

174828-37-6P 174828-38-7P 174828-39-8P

174828-40-1P 174828-41-2P 174828-42-3P

174828-43-4P 174828-44-5P 174828-45-6P

174828-46-7P 174828-47-8P 174828-48-9P

174828-49-0P 174828-50-3P 174828-51-4P

174828-52-5P 174828-53-6P 174828-54-7P

174828-55-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

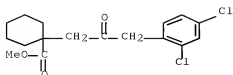
(preparation of (aryl)cyclopentanediones and (aryl)hydroxycyclopentenones

as

pesticides and herbicides)

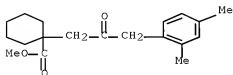
RN 174828-00-3 HCAPLUS

CN Cyclohexanecarboxylic acid, 1-[3-(2,4-dichlorophenyl)-2-oxopropyl]-, methyl ester (CA INDEX NAME)



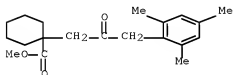
RN 174828-35-4 HCAPLUS

CN Cyclohexanecarboxylic acid, 1-[3-(2,4-dimethylphenyl)-2-oxopropyl]-, methyl ester (CA INDEX NAME)



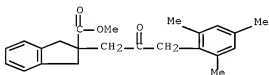
RN 174828-36-5 HCAPLUS

CN Cyclohexanecarboxylic acid, 1-[2-oxo-3-(2,4,6-trimethylphenyl)propyl]-, methyl ester (CA INDEX NAME)



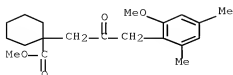
RN 174828-37-6 HCAPLUS

CN 1H-Indene-2-carboxylic acid, 2,3-dihydro-2-[2-oxo-3-(2,4,6-trimethylphenyl)propyl]-, methyl ester (CA INDEX NAME)



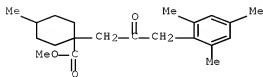
RN 174828-38-7 HCAPLUS

CN Cyclohexanecarboxylic acid, 1-[3-(2-methoxy-4,6-dimethylphenyl)-2-oxopropyl]-, methyl ester (CA INDEX NAME)

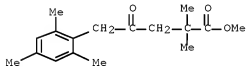


RN 174828-39-8 HCAPLUS

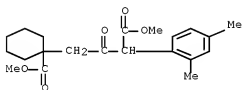
CN Cyclohexanecarboxylic acid, 4-methyl-1-[2-oxo-3-(2,4,6-trimethylphenyl)propyl]-, methyl ester (CA INDEX NAME)



RN 174828-40-1 HCAPLUS

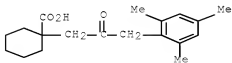
CN Benzenepentanoic acid,  $\alpha,\alpha,2,4,6$ -pentamethyl- $\gamma$ -oxo-, methyl ester (CA INDEX NAME)

RN 174828-41-2 HCAPLUS

CN Benzenoacetic acid,  $\alpha$ -[2-[1-(methoxycarbonyl)cyclohexyl]acetyl]-2,4-dimethyl-, methyl ester (CA INDEX NAME)

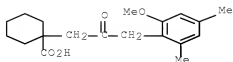
RN 174828-42-3 HCAPLUS

CN Cyclohexanecarboxylic acid, 1-[2-oxo-3-(2,4,6-trimethylphenyl)propyl]- (CA INDEX NAME)

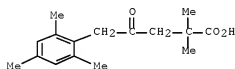


RN 174828-43-4 HCAPLUS

CN Cyclohexanecarboxylic acid, 1-[3-(2-methoxy-4,6-dimethylphenyl)-2-oxopropyl]- (CA INDEX NAME)

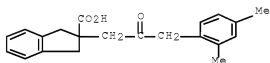


RN 174828-44-5 HCAPLUS

CN Benzenepentanoic acid,  $\alpha, \alpha, 2, 4, 6$ -pentamethyl- $\gamma$ -oxo- (CA INDEX NAME)

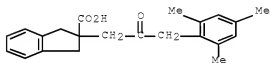
RN 174828-45-6 HCAPLUS

CN 1H-Indene-2-carboxylic acid, 2-[3-(2,4-dimethylphenyl)-2-oxopropyl]-2,3-dihydro- (CA INDEX NAME)



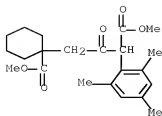
RN 174828-46-7 HCAPLUS

CN 1H-Indene-2-carboxylic acid, 2,3-dihydro-2-[2-oxo-3-(2,4,6-trimethylphenyl)propyl]- (CA INDEX NAME)

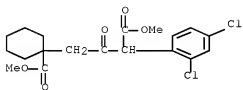


RN 174828-47-8 HCAPLUS

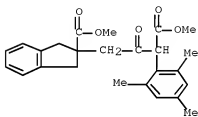
CN Benzeneacetic acid,  $\alpha$ -[2-[1-(methoxycarbonyl)cyclohexyl]acetyl]-2,4,6-trimethyl-, methyl ester (CA INDEX NAME)



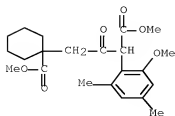
RN 174828-48-9 HCAPLUS

CN Benzeneacetic acid, 2,4-dichloro- $\alpha$ -[2-[1-(methoxycarbonyl)cyclohexyl]acetyl]-, methyl ester (CA INDEX NAME)

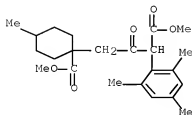
RN 174828-49-0 HCAPLUS

CN 1H-Indene-2-butanolic acid, 2,3-dihydro-2-(methoxycarbonyl)- $\beta$ -oxo- $\alpha$ -(2,4,6-trimethylphenyl)-, methyl ester (CA INDEX NAME)

RN 174828-50-3 HCAPLUS

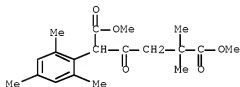
CN Benzeneacetic acid, 2-methoxy- $\alpha$ -[2-[1-(methoxycarbonyl)cyclohexyl]acetyl]-4,6-dimethyl-, methyl ester (CA INDEX NAME)

RN 174828-51-4 HCAPLUS

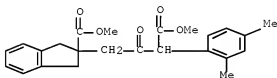
CN Benzeneacetic acid,  $\alpha$ -[2-[1-(methoxycarbonyl)-4-methylcyclohexyl]acetyl]-2,4,6-trimethyl-, methyl ester (CA INDEX NAME)

RN 174828-52-5 HCAPLUS

CN Hexanedioic acid, 2,2-dimethyl-4-oxo-5-(2,4,6-trimethylphenyl)-, 1,6-dimethyl ester (CA INDEX NAME)

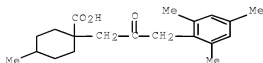


RN 174828-53-6 HCAPLUS

CN 1H-Indene-2-butanoic acid,  $\alpha$ -(2,4-dimethylphenyl)-2,3-dihydro-2-(methoxycarbonyl)- $\beta$ -oxo-, methyl ester (CA INDEX NAME)

RN 174828-54-7 HCAPLUS

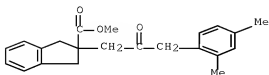
CN Cyclohexanecarboxylic acid, 4-methyl-1-[2-oxo-3-(2,4,6-trimethylphenyl)propyl]- (CA INDEX NAME)



RN 174828-55-8 HCAPLUS

CN 1H-Indene-2-carboxylic acid, 2-[3-(2,4-dimethylphenyl)-2-oxopropyl]-2,3-

dihydro-, methyl ester (CA INDEX NAME)



L9 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1995:898979 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 123:313979

ORIGINAL REFERENCE NO.: 123:56290h,56291a

TITLE: Preparation of 2,8-diaryl-1-aza-3,7,9-trioxaspiro[4.5]dec-1-ene pesticides

INVENTOR(S): Fischer, Reiner; Wachendorff-Neumann, Ulrike; Erdelen, Christoph; Turberg, Andreas; Mencke, Norbert

PATENT ASSIGNEE(S): Bayer A.-G., Germany

SOURCE: Ger. Offen., 41 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

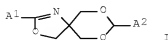
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4431225	A1	19950720	DE 1994-4431225	19940902
WO 9519364	A1	19950720	WO 1995-EP23	19950104
W: AU, BB, BG, BR, BY, CA, CN, CZ, FI, HU, JP, KR, KZ, LK, MX, NO, NZ, PL, RO, RU, SK, UA, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9514549	A	19950801	AU 1995-14549	19950104
EP 740669	A1	19961106	EP 1995-906294	19950104
EP 740669	B1	19990428		
R: BE, CH, DE, ES, FR, GB, IT, LI, NL				
JP 09507495	T	19970729	JP 1995-518808	19950104
BR 9506519	A	19971118	BR 1995-6519	19950104
ES 2132622	T3	19990816	ES 1995-906294	19950104
ZA 9500307	A	19950921	ZA 1995-307	19950116
US 5798376	A	19980825	US 1996-676155	19960711
PRIORITY APPLN. INFO.:			DE 1994-4401105	A1 19940117
			DE 1994-4431225	A 19940902
			WO 1995-EP23	W 19950104

OTHER SOURCE(S): CASREACT 123:313979; MARPAT 123:313979

GI



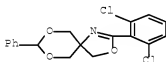
AB The title compds. [I; A1, A2 = (un)substituted aryl], useful as pesticides, especially insecticides and acaricides, are prepared and I-containing formulations presented. Thus, 2-phenyl-5-(2,6-dichlorobenzoylamino)-5-hydroxymethyl-1,3-dioxane was dissolved in PhMe, reacted with  $\text{SOCl}_2$ , and the intermediate reacted with  $\text{KOCMe}_3$  in PhMe, producing 8-phenyl-2-(2,6-dichlorophenyl)-1-aza-3,7,9-trioxaspiro[4.5]dec-1-ene, m.p. 158-160°, in 31% yield.

IT 169813-63-2P 169813-64-3P 169813-65-4P  
 169814-09-9P 169814-10-2P 169814-11-3P  
 169814-12-4P 169814-13-5P 169814-14-6P  
 169814-15-7P 169814-16-8P 169814-17-9P  
 169814-18-0P 169814-19-1P 169814-20-4P  
 169814-21-5P

RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of 2,8-diaryl-1-aza-3,7,9-trioxaspiro[4.5]dec-1-ene pesticides)

RN 169813-63-2 HCAPLUS

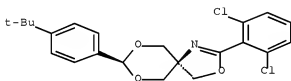
CN 3,7,9-Trioxa-1-azaspiro[4.5]dec-1-ene, 2-(2,6-dichlorophenyl)-8-phenyl- (CA INDEX NAME)



RN 169813-64-3 HCAPLUS

CN 3,7,9-Trioxa-1-azaspiro[4.5]dec-1-ene, 2-(2,6-dichlorophenyl)-8-[4-(1,1-dimethylethyl)phenyl]-, cis- (9CI) (CA INDEX NAME)

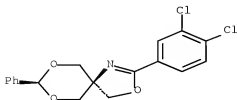
Relative stereochemistry.



RN 169813-65-4 HCAPLUS

CN 3,7,9-Trioxa-1-azaspiro[4.5]dec-1-ene, 2-(3,4-dichlorophenyl)-8-phenyl-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

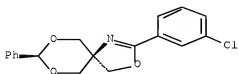




RN 169814-09-9 HCAPLUS

CN 3,7,9-Trioxa-1-azaspiro[4.5]dec-1-ene, 2-(3-chlorophenyl)-8-phenyl-, cis-  
(9CI) (CA INDEX NAME)

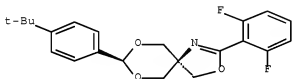
Relative stereochemistry.



RN 169814-10-2 HCAPLUS

CN 3,7,9-Trioxa-1-azaspiro[4.5]dec-1-ene,  
2-(2,6-difluorophenyl)-8-[4-(1,1-dimethylethyl)phenyl]-, cis- (9CI) (CA  
INDEX NAME)

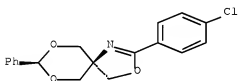
Relative stereochemistry.



RN 169814-11-3 HCAPLUS

CN 3,7,9-Trioxa-1-azaspiro[4.5]dec-1-ene, 2-(4-chlorophenyl)-8-phenyl-, cis-  
(9CI) (CA INDEX NAME)

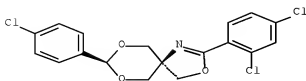
Relative stereochemistry.



RN 169814-12-4 HCAPLUS

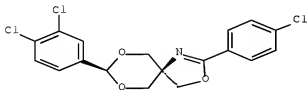
CN 3,7,9-Trioxa-1-azaspiro[4.5]dec-1-ene,  
8-(4-chlorophenyl)-2-(2,4-dichlorophenyl)-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.



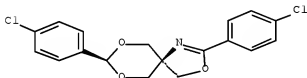
RN 169814-13-5 HCAPLUS  
CN 3,7,9-Trioxa-1-azaspiro[4.5]dec-1-ene,  
2-(4-chlorophenyl)-8-(3,4-dichlorophenyl)-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.



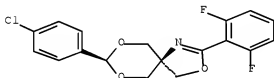
RN 169814-14-6 HCAPLUS  
CN 3,7,9-Trioxa-1-azaspiro[4.5]dec-1-ene, 2,8-bis(4-chlorophenyl)-, cis-  
(9CI) (CA INDEX NAME)

Relative stereochemistry.



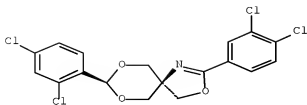
RN 169814-15-7 HCAPLUS  
CN 3,7,9-Trioxa-1-azaspiro[4.5]dec-1-ene,  
8-(4-chlorophenyl)-2-(2,6-difluorophenyl)-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 169814-16-8 HCAPLUS  
CN 3,7,9-Trioxa-1-azaspiro[4.5]dec-1-ene,  
8-(2,4-dichlorophenyl)-2-(3,4-dichlorophenyl)-, cis- (9CI) (CA INDEX  
NAME)

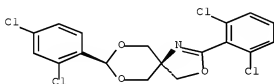
Relative stereochemistry.



RN 169814-17-9 HCAPLUS

CN 3,7,9-Trioxa-1-azaspiro[4.5]dec-1-ene,  
8-(2,4-dichlorophenyl)-2-(2,6-dichlorophenyl)-, cis- (9CI) (CA INDEX  
NAME)

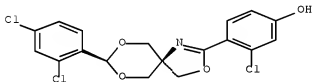
Relative stereochemistry.



RN 169814-18-0 HCAPLUS

CN Phenol, 3-chloro-4-[8-(2,4-dichlorophenyl)-3,7,9-trioxa-1-azaspiro[4.5]dec-  
1-en-2-yl]-, cis- (9CI) (CA INDEX NAME)

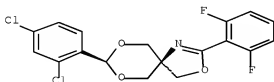
Relative stereochemistry.



RN 169814-19-1 HCAPLUS

CN 3,7,9-Trioxa-1-azaspiro[4.5]dec-1-ene,  
8-(2,4-dichlorophenyl)-2-(2,6-difluorophenyl)-, cis- (9CI) (CA INDEX  
NAME)

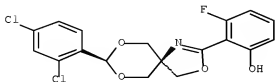
Relative stereochemistry.



RN 169814-20-4 HCAPLUS

CN Phenol, 2-[8-(2,4-dichlorophenyl)-3,7,9-trioxa-1-azaspiro[4.5]dec-1-en-2-yl]-3-fluoro-, cis- (9CI) (CA INDEX NAME)

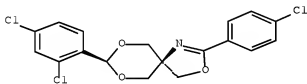
Relative stereochemistry.



RN 169814-21-5 HCAPLUS

CN 3,7,9-Trioxa-1-azaspiro[4.5]dec-1-ene, 2-(4-chlorophenyl)-8-(2,4-dichlorophenyl)-, cis- (9CI) (CA INDEX NAME)

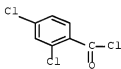
Relative stereochemistry.



IT 89-75-8, 2,4-Dichlorobenzoyl chloride 126-11-4,  
Tris(hydroxymethyl)nitromethane 939-97-9,  
4-tert-Butylbenzaldehyde 4659-45-4, 2,6-Dichlorobenzoyl chloride  
169813-66-5 169813-68-7 169813-69-8  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation of 2,8-diaryl-1-aza-3,7,9-trioxaspiro[4.5]dec-1-ene  
pesticides from)

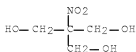
RN 89-75-8 HCAPLUS

CN Benzoyl chloride, 2,4-dichloro- (CA INDEX NAME)



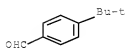
RN 126-11-4 HCAPLUS

CN 1,3-Propanediol, 2-(hydroxymethyl)-2-nitro- (CA INDEX NAME)



RN 939-97-9 HCAPLUS

CN Benzaldehyde, 4-(1,1-dimethylethyl)- (CA INDEX NAME)



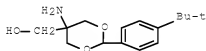
RN 4659-45-4 HCAPLUS

CN Benzoyl chloride, 2,6-dichloro- (CA INDEX NAME)



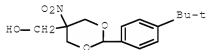
RN 169813-66-5 HCAPLUS

CN 1,3-Dioxane-5-methanol, 5-amino-2-[4-(1,1-dimethylethyl)phenyl]- (CA INDEX NAME)



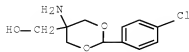
RN 169813-68-7 HCAPLUS

CN 1,3-Dioxane-5-methanol, 2-[4-(1,1-dimethylethyl)phenyl]-5-nitro- (CA INDEX NAME)



RN 169813-69-8 HCAPLUS

CN 1,3-Dioxane-5-methanol, 5-amino-2-(4-chlorophenyl)- (CA INDEX NAME)



IT 169813-67-6P 169813-70-1P 169813-71-2P  
 169813-72-3P 169813-73-4P 169813-74-5P  
 169813-75-6P 169813-76-7P 169813-77-8P  
 169813-78-9P 169813-79-0P 169813-80-3P  
 169813-81-4P 169813-82-5P 169813-83-6P  
 169813-84-7P 169813-85-8P 169813-86-9P  
 169813-87-0P 169813-88-1P 169813-89-2P  
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 169814-08-8P

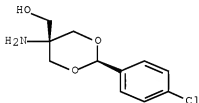
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)

(preparation of 2,8-diaryl-1-aza-3,7,9-trioxaspiro[4.5]dec-1-ene  
 pesticides from)

RN 169813-67-6 HCAPLUS

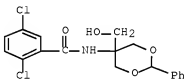
CN 1,3-Dioxane-5-methanol, 5-amino-2-(4-chlorophenyl)-, trans- (CA INDEX  
 NAME)

Relative stereochemistry.



RN 169813-70-1 HCAPLUS

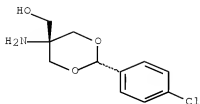
CN Benzamide, 2,5-dichloro-N-[5-(hydroxymethyl)-2-phenyl-1,3-dioxan-5-yl]-  
 (CA INDEX NAME)



RN 169813-71-2 HCAPLUS

CN 1,3-Dioxane-5-methanol, 5-amino-2-(4-chlorophenyl)-, cis- (CA INDEX NAME)

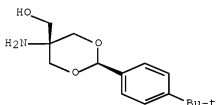
Relative stereochemistry.



RN 169813-72-3 HCAPLUS

CN 1,3-Dioxane-5-methanol, 5-amino-2-[4-(1,1-dimethylethyl)phenyl]-, cis- (9CI) (CA INDEX NAME)

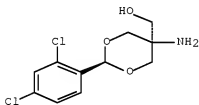
Relative stereochemistry.



RN 169813-73-4 HCAPLUS

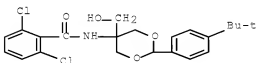
CN 1,3-Dioxane-5-methanol, 5-amino-2-(2,4-dichlorophenyl)-, cis- (CA INDEX NAME)

Relative stereochemistry.



RN 169813-74-5 HCAPLUS

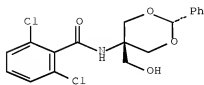
CN Benzamide, 2,6-dichloro-N-[2-[4-(1,1-dimethylethyl)phenyl]-5-(hydroxymethyl)-1,3-dioxan-5-yl]- (CA INDEX NAME)



RN 169813-75-6 HCAPLUS

CN Benzamide, 2,6-dichloro-N-[5-(hydroxymethyl)-2-phenyl-1,3-dioxan-5-yl]-, cis- (9CI) (CA INDEX NAME)

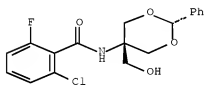
Relative stereochemistry.



RN 169813-76-7 HCAPLUS

CN Benamide, 2-chloro-6-fluoro-N-[5-(hydroxymethyl)-2-phenyl-1,3-dioxan-5-yl]-, cis- (9CI) (CA INDEX NAME)

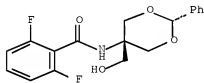
Relative stereochemistry.



RN 169813-77-8 HCAPLUS

CN Benamide, 2,6-difluoro-N-[5-(hydroxymethyl)-2-phenyl-1,3-dioxan-5-yl]-, cis- (9CI) (CA INDEX NAME)

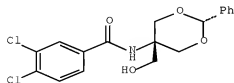
Relative stereochemistry.



RN 169813-78-9 HCAPLUS

CN Benamide, 3,4-dichloro-N-[5-(hydroxymethyl)-2-phenyl-1,3-dioxan-5-yl]-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.



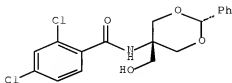
RN 169813-79-0 HCAPLUS

CN Benamide, 2,4-dichloro-N-[5-(hydroxymethyl)-2-phenyl-1,3-dioxan-5-yl]-, cis- (9CI) (CA INDEX NAME)



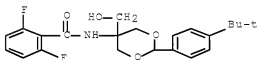
cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 169813-80-3 HCAPLUS

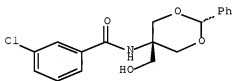
CN Benzamide, N-[2-[4-(1,1-dimethylethyl)phenyl]-5-(hydroxymethyl)-1,3-dioxan-5-yl]-2,6-difluoro- (CA INDEX NAME)



RN 169813-81-4 HCAPLUS

CN Benzamide, 3-chloro-N-[5-(hydroxymethyl)-2-phenyl-1,3-dioxan-5-yl]-, cis- (9CI) (CA INDEX NAME)

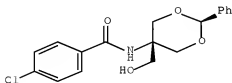
Relative stereochemistry.



RN 169813-82-5 HCAPLUS

CN Benzamide, 4-chloro-N-[5-(hydroxymethyl)-2-phenyl-1,3-dioxan-5-yl]-, trans- (9CI) (CA INDEX NAME)

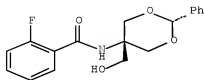
Relative stereochemistry.



RN 169813-83-6 HCAPLUS

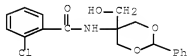
CN Benzamide, 2-fluoro-N-[5-(hydroxymethyl)-2-phenyl-1,3-dioxan-5-yl]-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 169813-84-7 HCAPLUS

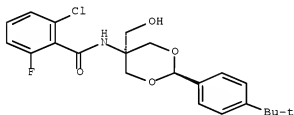
CN Benzamide, 2-chloro-N-[5-(hydroxymethyl)-2-phenyl-1,3-dioxan-5-yl]- (CA INDEX NAME)



RN 169813-85-8 HCAPLUS

CN Benzamide, 2-chloro-N-[2-[4-(1,1-dimethylethyl)phenyl]-5-(hydroxymethyl)-1,3-dioxan-5-yl]-6-fluoro-, cis- (9CI) (CA INDEX NAME)

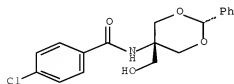
Relative stereochemistry.



RN 169813-86-9 HCAPLUS

CN Benzamide, 4-chloro-N-[5-(hydroxymethyl)-2-phenyl-1,3-dioxan-5-yl]-, cis- (9CI) (CA INDEX NAME)

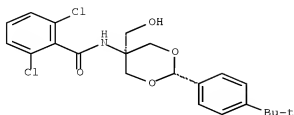
Relative stereochemistry.



RN 169813-87-0 HCAPLUS

CN Benzamide, 2,6-dichloro-N-[2-[4-(1,1-dimethylethyl)phenyl]-5-(hydroxymethyl)-1,3-dioxan-5-yl]-, trans- (9CI) (CA INDEX NAME)

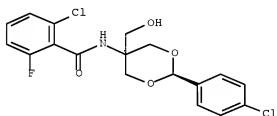
Relative stereochemistry.



RN 169813-88-1 HCAPLUS

CN Benzamide, 2-chloro-N-[2-(4-chlorophenyl)-5-(hydroxymethyl)-1,3-dioxan-5-yl]-6-fluoro-, cis- (9CI) (CA INDEX NAME)

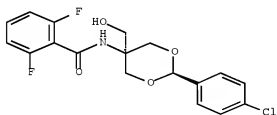
Relative stereochemistry.



RN 169813-89-2 HCAPLUS

CN Benzamide, N-[2-(4-chlorophenyl)-5-(hydroxymethyl)-1,3-dioxan-5-yl]-2,6-difluoro-, cis- (9CI) (CA INDEX NAME)

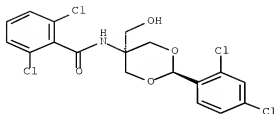
Relative stereochemistry.



RN 169813-90-5 HCAPLUS

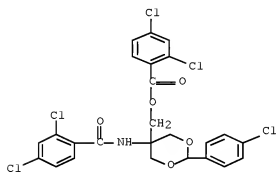
CN Benzamide, 2,6-dichloro-N-[2-(2,4-dichlorophenyl)-5-(hydroxymethyl)-1,3-dioxan-5-yl]-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.



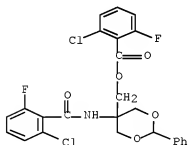
RN 169813-91-6 HCAPLUS

CN Benzoic acid, 2,4-dichloro-, [2-(4-chlorophenyl)-5-[(2,4-dichlorobenzoyl)amino]-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)



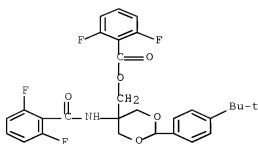
RN 169813-92-7 HCAPLUS

CN Benzoic acid, 2-chloro-6-fluoro-, [5-[(2-chloro-6-fluorobenzoyl)amino]-2-phenyl-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)



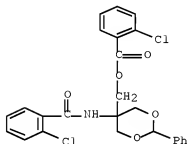
RN 169813-93-8 HCAPLUS

CN Benzoic acid, 2,6-difluoro-, [5-[(2,6-difluorobenzoyl)amino]-2-[4-(1,1-dimethylethyl)phenyl]-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)



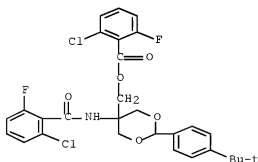
RN 169813-94-9 HCAPLUS

CN Benzoic acid, 2-chloro-, [5-[(2-chlorobenzoyl)amino]-2-phenyl-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)



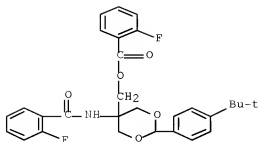
RN 169813-95-0 HCAPLUS

CN Benzoic acid, 2-chloro-6-fluoro-, [5-[(2-chloro-6-fluorobenzoyl)amino]-2-[4-(1,1-dimethylethyl)phenyl]-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)



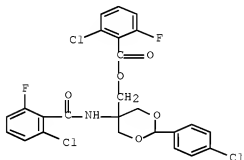
RN 169813-96-1 HCAPLUS

CN Benzoic acid, 2-fluoro-, [2-[4-(1,1-dimethylethyl)phenyl]-5-[(2-fluorobenzoyl)amino]-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)



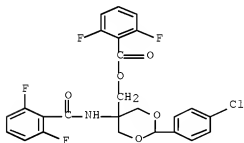
RN 169813-97-2 HCAPLUS

CN Benzoic acid, 2-chloro-6-fluoro-, [5-[(2-chloro-6-fluorobenzoyl)amino]-2-(4-chlorophenyl)-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)



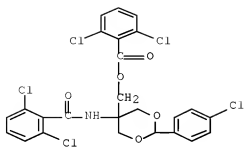
RN 169813-98-3 HCAPLUS

CN Benzoic acid, 2,6-difluoro-, [2-(4-chlorophenyl)-5-[(2,6-difluorobenzoyl)amino]-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)



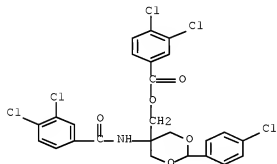
RN 169813-99-4 HCAPLUS

CN Benzoic acid, 2,6-dichloro-, [2-(4-chlorophenyl)-5-[(2,6-dichlorobenzoyl)amino]-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)



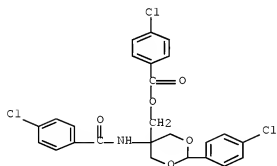
RN 169814-00-0 HCAPLUS

CN Benzoic acid, 3,4-dichloro-, [2-(4-chlorophenyl)-5-[(3,4-dichlorobenzoyl)amino]-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)



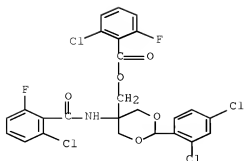
RN 169814-01-1 HCAPLUS

CN Benzoic acid, 4-chloro-, [5-[(4-chlorobenzoyl)amino]-2-(4-chlorophenyl)-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)



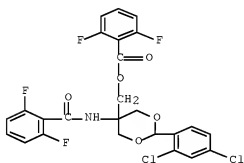
RN 169814-02-2 HCAPLUS

CN Benzoic acid, 2-chloro-6-fluoro-, [5-[(2-chloro-6-fluorobenzoyl)amino]-2-(2,4-dichlorophenyl)-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)



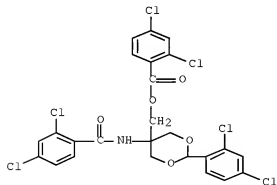
RN 169814-03-3 HCAPLUS

CN Benzoic acid, 2,6-difluoro-, [2-(2,4-dichlorophenyl)-5-[(2,6-difluorobenzoyl)amino]-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)



RN 169814-04-4 HCAPLUS

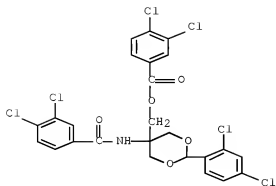
CN Benzoic acid, 2,4-dichloro-, [5-[(2,4-dichlorobenzoyl)amino]-2-(2,4-dichlorophenyl)-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)



RN 169814-05-5 HCAPLUS

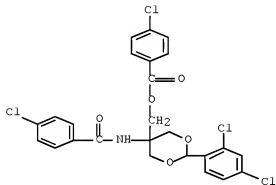
CN Benzoic acid, 3,4-dichloro-, [5-[(3,4-dichlorobenzoyl)amino]-2-(2,4-dichlorophenyl)-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)





RN 169814-06-6 HCAPLUS

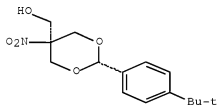
CN Benzoic acid, 4-chloro-, [5-[(4-chlorobenzoyl)amino]-2-(2,4-dichlorophenyl)-1,3-dioxan-5-yl]methyl ester (CA INDEX NAME)



RN 169814-07-7 HCAPLUS

CN 1,3-Dioxane-5-methanol, 2-[4-(1,1-dimethylethyl)phenyl]-5-nitro-, trans- (CA INDEX NAME)

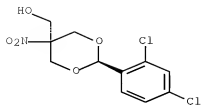
Relative stereochemistry.



RN 169814-08-8 HCAPLUS

CN 1,3-Dioxane-5-methanol, 2-(2,4-dichlorophenyl)-5-nitro-, cis- (CA INDEX NAME)

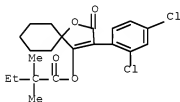
Relative stereochemistry.



DISPLAY OF REQUESTED COMPOUND

=&gt; =&gt; d l10

L10 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN  
RN 148477-71-8 REGISTRY  
ED Entered STN: 02 Jul 1993  
CN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 1-Oxaspiro[4.5]decane, butanoic acid deriv.  
OTHER NAMES:  
CN BAJ 2740  
CN Envidor  
CN Spirodiclofen  
MF C21 H24 Cl2 O4  
CI COM  
SR CA  
LC STN Files: AGRICOLA, ANABSTR, BIOSIS, CA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, MRCK\*, PATDPASPC, PROMT, RTECS\*, TOXCENTER, USPAT2, USPATFULL  
(\*File contains numerically searchable property data)



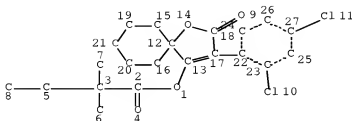
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

187 REFERENCES IN FILE CA (1907 TO DATE)  
58 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
196 REFERENCES IN FILE CAPLUS (1907 TO DATE)

ED Entered STN: 02 Jul 1993

## RESULTS FROM SEARCHES IN REGISTRY AND CAPLUS

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L10          1 SEA FILE=REGISTRY ABB=ON  148477-71-8 /RN
L11          STR
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NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 27

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STEREO ATTRIBUTES: NONE
L13      87 SEA FILE=REGISTRY SSS FUL L11
L14     223 SEA FILE=HCAPLUS ABB=ON  L10 OR L13
L15     12 SEA FILE=HCAPLUS ABB=ON  L14 AND ?ACARID?
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L15 ANSWER 1 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2009:470644 HCAPLUS Full-text  
 DOCUMENT NUMBER: 150:440241  
 TITLE: Synergistic insecticide and acaricide composition  
 containing spirodiclofen  
 INVENTOR(S): Shao, Changlu; Wang, Lijuan; Li, Guoqing; Li, Yufeng  
 PATENT ASSIGNEE(S): Zibo Nab Agrochemicals Co., Ltd., Peop. Rep. China  
 SOURCE: Faming Zhuanli Shengqing Gongkai Shuomingshu, 8pp.  
 CODEN: CNXXEV  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Chinese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101406185	A	20090415	CN 2008-10172593	20081031
PRIORITY APPLN. INFO.:			CN 2008-10172593	20081031
AB The title insecticidal/acaricidal composition comprises spiroadiclofen and the second component at a ratio of 30:1-1:1, and optionally organic solvent, emulsifying agent, surfactant, inert filler, and/or other adjuvants, wherein the second component is selected from tebufenpyrad, pyridaben, avermectin, and propargite. The inventive insecticidal/acaricidal composition is used for killing and preventing pests and acarid on fruit tree, crops, cotton, and vegetable.				

IT 263895-54-1, Spirodiclofen-tebufenpyrad mixture 263895-56-3  
 , Spirodiclofen-pyridaben mixture 1080510-61-7,  
 Spirodiclofen-propargite mixture 1144031-63-9,  
 Spirodiclofen-avermectin mixture  
 RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL  
 (Biological study); USES (Uses)  
 (synergistic insecticide and acaricide composition containing spirodiclofen

and

tebufenpyrad, pyridaben, avermectin, or propargite)

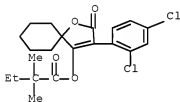
RN 263895-54-1 HCAPLUS

CN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester, mixt. with 4-chloro-N-[[4-(1,1-dimethylethyl)phenyl]methyl]-3-ethyl-1-methyl-1H-pyrazole-5-carboxamide (9CI) (CA INDEX NAME)

CM 1

CRN 148477-71-8

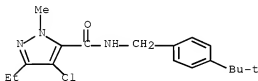
CMF C21 H24 C12 O4



CM 2

CRN 119168-77-3

CMF C18 H24 Cl N3 O



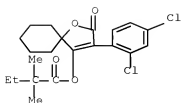
RN 263895-56-3 HCAPLUS

CN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester, mixt. with 4-chloro-2-(1,1-dimethylethyl)-5-[[[4-(1,1-dimethylethyl)phenyl]methyl]thio]-3(2H)-pyridazinone (9CI) (CA INDEX NAME)

CM 1

CRN 148477-71-8

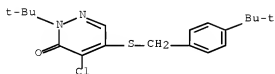
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CM 2

CRN 96489-71-3

CMF C19 H25 Cl N2 O S



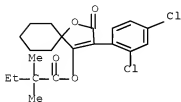
RN 1080510-61-7 HCAPLUS

CN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester, mixt. with 2-[4-(1,1-dimethylethyl)phenoxy]cyclohexyl 2-propyn-1-yl sulfite (CA INDEX NAME)

CM 1

CRN 148477-71-8

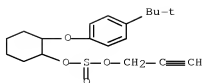
CMF C21 H24 Cl2 O4



CM 2

CRN 2312-35-8

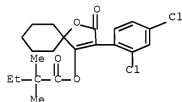
CMF C19 H26 O4 S



RN 1144031-63-9 HCAPLUS  
CN INDEX NAME NOT YET ASSIGNED

CM 1

CRN 148477-71-8  
CMF C21 H24 C12 O4



CM 2

CRN 73989-17-0  
CMF Unspecified  
CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L15 ANSWER 2 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:470602 HCAPLUS Full-text

DOCUMENT NUMBER: 150:465793

TITLE: Synergistic insecticidal and acaricidal composition containing spirodiclofen and diafenthiuron and its application

INVENTOR(S): Cao, Mingzhang; Kong, Jian; Chen, Xiaoxia; Su, Tong; Liu, Shengzhao; Wang, Wenzhong

PATENT ASSIGNEE(S): Shenzhen Noposion Agrochemicals Manufacturing Co., Ltd., Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 8pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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CN 101406186	A	20090415	CN 2008-10181972	20081128
PRIORITY APPLN. INFO.:			CN 2008-10181972	20081128

AB The title insecticidal and acaricidal composition is composed of spiroadiclofen, diafenthuron and adjuvant. The weight ratio of spiroadiclofen to diafenthuron is 1:1-1:10. The formulation comprises wettable powder, water emulsion, emulsifiable solution, water-dispersible granules, tablets or suspension. The insecticidal and acaricidal composition is used for prevention of pest and acarid on plant.

IT 263895-50-7, Spiroadiclofen-diafenthuron mixture  
 RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)  
 (synergistic insecticide and acaricide containing spiroadiclofen and diafenthuron and its application)

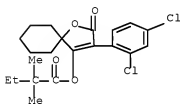
RN 263895-50-7 HCAPLUS

CN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester, mixt. with  
 N-[2,6-bis(1-methylethyl)-4-phenoxyphenyl]-N'-(1,1-dimethylethyl)thiourea (9CI) (CA INDEX NAME)

CM 1

CRN 148477-71-8

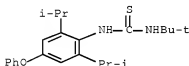
CMF C21 H24 C12 O4



CM 2

CRN 80060-09-9

CMF C23 H32 N2 O S



L15 ANSWER 3 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:470451 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 150:489008

TITLE: Spiroadiclofen and fenbutatin oxide-containing acaricidal composition and application thereof

INVENTOR(S): Cao, Mingzhang; Kong, Jian; Chen, Xiaoxia; Liu, Shengzhao; Zhu, Mujin; Wang, Lingling

PATENT ASSIGNEE(S): Shenzhen Noposion Agrochemicals Manufacturing Co., Ltd., Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 10pp.



DOCUMENT TYPE: CODEN: CNXKEV  
 LANGUAGE: Patent  
 FAMILY ACC. NUM. COUNT: Chinese  
 PATENT INFORMATION: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101406200	A	20090415	CN 2008-10181977	20081128
PRIORITY APPLN. INFO.:			CN 2008-10181977	20081128

AB The active component of the title acaricidal composition is composed of spiroadiclofen and fenbutatin oxide. The formulation of the acaricidal composition comprises wettable powder, water miscible oil, emulsifiable solution, microemulsion, water dispersible granules or tablets, and suspension. The acaricidal composition is used for preventing plant acarid.

IT 263895-60-9, Spiroadiclofen-fenbutatin oxide mixture  
 RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)  
 (spiroadiclofen and fenbutatin oxide-containing synergistic acaricide and its application)

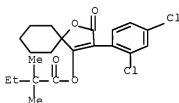
RN 263895-60-9 HCAPLUS

CN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester, mixt. with  
 hexakis(2-methyl-2-phenylpropyl)distannoxane (9CI) (CA INDEX NAME)

CM 1

CRN 148477-71-8

CMF C21 H24 Cl2 O4

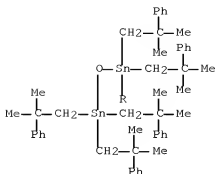


CM 2

CRN 13356-08-6

CMF C60 H78 O Sn2

PAGE 1-A



PAGE 2-A



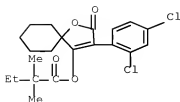
L15 ANSWER 4 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2009:470434 HCAPLUS [Full-text](#)  
 DOCUMENT NUMBER: 150:489006  
 TITLE: Composite acaricide composition containing  
 spirodiclofen and ivermectin  
 INVENTOR(S): Zhang, Shaowu; Mi, Huafeng; Cao, Qiaoli; Zhang, Tao  
 PATENT ASSIGNEE(S): Shaanxi Weierqi Crop Protection Co., Ltd., Peop. Rep.  
 China  
 SOURCE: Faming Zhuanli Shengqing Gongkai Shuomingshu, 13pp.  
 CODEN: CNXXEV  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Chinese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
CN 101406197	A	20090415	CN 2008-10232327	20081119
PRIORITY APPLN. INFO.:			CN 2008-10232327	20081119
AB The title acaricide composition is composed of spirodiclofen and ivermectin as a weight ratio of 1:(0.01-10). The acaricide composition can be prepared into wettable powder, water-dispersible granule, suspension, emulsion or microemulsion for prevention and control of acarid in fruit trees with good synergistic effect and high safety.				
IT 1147999-21-0, Spirodiclofen-ivermectin mixture RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses) (synergistic acaricide composition containing spirodiclofen and ivermectin)				
RN 1147999-21-0 HCAPLUS				
CN INDEX NAME NOT YET ASSIGNED				

CM 1

CRN 148477-71-8

CMF C21 H24 Cl2 O4



CM 2

CRN 70288-86-7

CMF Unspecified

CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L15 ANSWER 5 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:470420 HCAPLUS Full-text

DOCUMENT NUMBER: 150:440238

TITLE: Acaricidal composition containing spirodiclofen and fenpyroximate, or spirodiclofen and tebufenpyrad, and application thereof

INVENTOR(S): Cao, Mingzhang; Kong, Jian; Chen, Xiaoxia; Liu, Shengzhao; Zhao, Jun; Wang, Xinjun

PATENT ASSIGNEE(S): Shenzhen Noposion Agrochemicals Manufacturing Co., Ltd., Peop. Rep. China

SOURCE: Faming Zhuanli Shengqing Gongkai Shuomingshu, 11pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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CN 101406192	A	20090415	CN 2008-10181976	20081128

PRIORITY APPLN. INFO.: CN 2008-10181976 20081128

AB The title acaricidal composition comprises spirodiclofen and fenpyroximate at a ratio of 10:1-1:10, or spirodiclofen and tebufenpyrad at a ratio of 5:1-1:50. The acaricidal composition can be processed into wettable powder, aqueous emulsion, emulsified oil, microemulsion, water-dispersible granule, tablet, and suspension. The inventive acaricidal composition has synergistic effect and is used for controlling and preventing acarid on plants, with reduced dosage and cost and delayed acaricide resistance.

IT 263895-54-1, Spirodiclofen-tebufenpyrad mixture 263895-55-2

, Spirodiclofen-fenpyroximate mixture

RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)

(synergistic acaricide containing spirodiclofen and fenpyroximate, or spirodiclofen and tebufenpyrad)

RN 263895-54-1 HCAPLUS

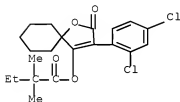
CN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester, mixt. with

4-chloro-N-[[4-(1,1-dimethylethyl)phenyl]methyl]-3-ethyl-1-methyl-1H-pyrazole-5-carboxamide (9CI) (CA INDEX NAME)

CM 1

CRN 148477-71-8

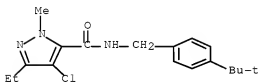
CMF C21 H24 Cl2 O4



CM 2

CRN 119168-77-3

CMF C18 H24 Cl N3 O



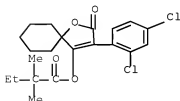
RN 263895-55-2 HCAPLUS

CN Benzoic acid, 4-[[[(E)-[(1,3-dimethyl-5-phenoxy-1H-pyrazol-4-yl)methylene]amino]oxy]methyl]-, 1,1-dimethylethyl ester, mixt. with 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl 2,2-dimethylbutanoate (9CI) (CA INDEX NAME)

CM 1

CRN 148477-71-8

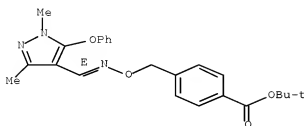
CMF C21 H24 Cl2 O4



CM 2

CRN 134098-61-6  
CMF C24 H27 N3 O4

Double bond geometry as shown.



L15 ANSWER 6 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2009:437441 HCAPLUS [Full-text](#)  
 DOCUMENT NUMBER: 150:440235  
 TITLE: Acaricidal composition containing spirodiclofen and flufenoxuron, and its preparation process  
 INVENTOR(S): Zhang, Shaowu; Mi, Huafeng; Cao, Qiaoli; Zhang, Tao  
 PATENT ASSIGNEE(S): Shaanxi Weierqi Crop Protection Co., Ltd., Peop. Rep. China  
 SOURCE: Faming Zhuanli Shengqing Gongkai Shuomingshu, 12pp.  
 CODEN: CNXXEV  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Chinese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
CN 101401584	A	20090408	CN 2008-10232326	20081119
PRIORITY APPLN. INFO.:			CN 2008-10232326	20081119

AB The acaricidal composition contains spirodiclofen and flufenoxuron at a weight ratio of 0.1-10:1. The acaricidal composition has the advantages of high acaricidal effect, less dose, and acaricide resistance-delaying effect, and can be used to prepare wettable powder, water-dispersible granule, or suspension for preventing and controlling acarid in fruit trees.

IT 263895-57-4, Spirodiclofen-flufenoxuron mixture  
 RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)

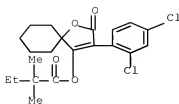
(synergistic acaricide containing spirodiclofen and flufenoxuron)

RN 263895-57-4 HCAPLUS

CN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester, mixt. with N-[[[4-[2-chloro-4-(trifluoromethyl)phenoxy]-2-fluorophenyl]amino]carbonyl]-2,6-difluorobenzamide (9CI) (CA INDEX NAME)

CM 1

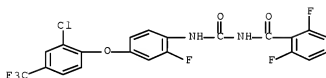
CRN 148477-71-8  
CMF C21 H24 Cl2 O4



CM 2

CRN 101463-69-8

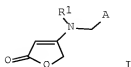
CMF C21 H11 Cl F6 N2 O3



L15 ANSWER 7 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2009:425138 HCAPLUS Full-text  
 DOCUMENT NUMBER: 150:391640  
 TITLE: Insecticidal and acaricidal combinations of furanones and tetrionic or tetramic acids  
 Hungenberg, Heike; Jeschke, Peter; Velten, Robert; Fischer, Reiner; Thielert, Wolfgang  
 INVENTOR(S): Bayer CropScience AG, Germany  
 PATENT ASSIGNEE(S): Ger. Offen., 46pp.  
 SOURCE: CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 102007045919	A1	20090409	DE 2007-102007045919	20070926
PRIORITY APPLN. INFO.:			DE 2007-102007045919	20070926
OTHER SOURCE(S):	MARPAT	150:391640		

GI



AB Combinations of  $\geq 1$  compound of the formula I (R1 = Me, cyclopropyl, MeO, etc.; A = 6-fluoro-3-pyridinyl, 6-chloro-3-pyridinyl, etc.) and  $\geq 1$  active substance selected from tetrionic or tetramic acids are very suitable for controlling insects and acarids. Thus, I (R1 = 2,2-difluoroethyl, A = 6-chloro-3-pyridinyl) + spiroticlofen at 20 + 20 g/ha (1:1 mixing ratio) synergistically controlled green peach aphid (*Myzus persicae*) on heavily infested cabbage leaves, with 100% mortality after 6 days.

IT 1138078-87-1 1138078-91-7  
 RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)  
 (as synergistic insecticide and acaricide)

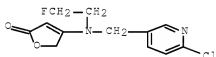
RN 1138078-87-1 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED

CM 1

CRN 951659-45-3

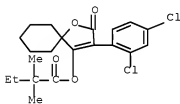
CMF C12 H12 C1 F N2 O2



CM 2

CRN 148477-71-8

CMF C21 H24 C12 O4



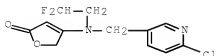
RN 1138078-91-7 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED

CM 1

CRN 951659-40-8

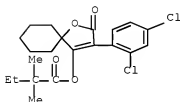
CMF C12 H11 C1 F2 N2 O2



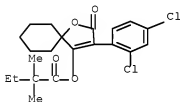
CM 2

CRN 148477-71-8

CMF C21 H24 Cl2 O4



IT 148477-71-8, Spirodiclofen  
 RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)  
 (insecticidal and acaricidal combinations of furanones with)  
 RN 148477-71-8 HCAPLUS  
 CN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)



L15 ANSWER 8 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2009:114676 HCAPLUS [Full-text](#)  
 DOCUMENT NUMBER: 150:161626  
 TITLE: Pesticidal combinations comprising genistein and insecticides  
 INVENTOR(S): Andersch, Wolfram; Hungenberg, Heike; Mansfield, Darren  
 PATENT ASSIGNEE(S): Bayer Cropscience A.-G., Germany  
 SOURCE: PCT Int. Appl., 39pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2009012909	A2	20090129	WO 2008-EP5750	20080715
WO 2009012909	A3	20090507		

W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,



FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,  
 KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,  
 ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,  
 PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ,  
 TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW  
 RW: AI, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,  
 IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK,  
 TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,  
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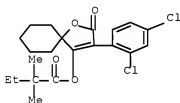
PRIORITY APPLN. INFO.: EP 2007-112965 A 20070723

AB Novel active substance combinations consist of genistein and  $\geq 1$  component selected from 23 groups of known insecticides are highly suitable for controlling undesirable animal pests such as insects, acarids, or nematodes. The combinations (e.g., genistein and clothianidin or genistein and fipronil) may act on the pest or its environment, and they may be used for treatment of seeds or transgenic plants.

IT 148477-71-8D, Spirodiclofen, mixts. containing  
 RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)  
 (synergistic pesticides containing genistein and insecticides)

RN 148477-71-8 HCAPLUS

CN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)



L15 ANSWER 9 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2008:944013 HCAPLUS [Full-text](#)  
 DOCUMENT NUMBER: 149:217454  
 TITLE: Pesticidally active compositions comprising  
 3-acetyl-1-phenylpyrazole compounds  
 INVENTOR(S): Koradin, Christopher; Langewald, Juergen; Anspaugh,  
 Douglas D.; Cotter, Henry Van Tuyt  
 PATENT ASSIGNEE(S): BASF SE, Germany  
 SOURCE: PCT Int. Appl., 38pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008092851	A2	20080807	WO 2008-EP51026	20080129
W:	AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,			

PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM,  
 TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW  
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,  
 IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK,  
 TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,  
 TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,  
 AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.:

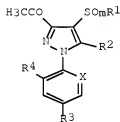
US 2007-887226P

P 20070130

OTHER SOURCE(S):

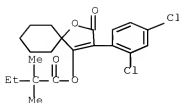
MARPAT 149:217454

GI



I

- AB The title pesticidal compns. comprise as active components (1)  $\geq 1$  3-acetyl-1-phenylpyrazole compound I (X = N, CR<sub>5</sub>; R<sub>1</sub> = C1-4 (halo)alkyl; R<sub>2</sub> = NR<sub>6</sub>R<sub>7</sub>, S(O)nR<sub>8</sub>; R<sub>3</sub> = halo, C1-4 haloalkyl, C1-4 haloalkoxy, SF<sub>5</sub> or S(O)pR<sub>9</sub>; R<sub>4</sub> = H, halo; R<sub>5</sub> = halo; R<sub>6</sub> = H, C1-4 (halo)alkyl, COR<sub>10</sub>, S(O)qCF<sub>3</sub>; R<sub>7</sub> = H, C1-4, or R<sub>6</sub> and R<sub>7</sub> together form a C4-6 alkylene moiety, wherein one CH<sub>2</sub> may be replaced by O or NR<sub>11</sub>; R<sub>8</sub>, R<sub>9</sub>, R<sub>10</sub>, R<sub>11</sub> independently = H, C1-4 (halo)alkyl; m, n, p, q independently = 0, 1 or 2) or a salt thereof and (2)  $\geq 1$  addnl. pesticide, selected from GABA-gated chloride channel antagonists, nicotinic acetylcholine receptor agonists/antagonists, juvenile hormone mimics, compounds affecting the oxidative phosphorylation, inhibitors of the chitin biosynthesis, molting disruptors, mitochondrial electron transport inhibitors, voltage-dependent sodium channel blockers, inhibitors of the lipid synthesis, and various other compds. These compds. are applied simultaneously, that is jointly or sep., or in succession for protecting plants from attack or infestation by insects, acarids or nematodes. In a test for evaluating control of green peach aphid (Myzus persica) on potted bell pepper seedlings, a synergistic insecticide mixture of acetoprole (3 ppm) + imidacloprid (0.04 ppm) caused 86% aphid mortality, whereas expected mortality (Limpel's formula) was 73%.
- IT 148477-71-8, Spirodiclofen  
 RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)  
 (pesticidal compns. comprising acetylphenylpyrazoles and addnl. active compds.)
- RN 148477-71-8 HCAPLUS
- CN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)



L15 ANSWER 10 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2008:675069 HCAPLUS Full-text  
 DOCUMENT NUMBER: 149:3149  
 TITLE: Insecticidal, acaricidal and nematocidal mixtures containing formononetin  
 INVENTOR(S): Andersch, Wolfram; Hungenberg, Heike; Mansfield, Darren  
 PATENT ASSIGNEE(S): Bayer CropScience A.-G., Germany  
 SOURCE: PCT Int. Appl., 39pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008064778	A2	20080605	WO 2007-EP9898	20071116
WO 2008064778	A3	20090226		

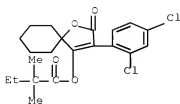
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DE 102006056544 A1 20080605 DE 2006-102006056544 20061129  
 DE 2006-102006056544A 20061129

PRIORITY APPLN. INFO.:  
 AB The invention relates to active ingredient combinations consisting of formononetin and a known insecticide. The combinations are suitable for controlling insects, acarids or nematodes.  
 IT 1028471-49-9  
 RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses) (insecticidal, acaricidal and nematocidal composition)  
 RN 1028471-49-9 HCAPLUS  
 CN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester, mixt. with 6,7-dihydroxy-3-(4-methoxyphenyl)-4H-1-benzopyran-4-one (CA INDEX NAME)

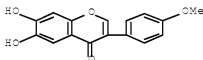
CM 1  
 CRN 148477-71-8  
 CMF C21 H24 C12 O4



CM 2

CRN 897-46-1

CMF C16 H12 O5



L15 ANSWER 11 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:110679 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 145:501047

TITLE: Insecticidal combinations containing alkoxyated amines

AUTHOR(S): Anon.

CORPORATE SOURCE: UK

SOURCE: Research Disclosure (2006), 501(Jan.), P18-P19 (No. 501011)

CODEN: RSDSBB; ISSN: 0374-4353

PUBLISHER: Kenneth Mason Publications Ltd.

DOCUMENT TYPE: Journal; Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RD 501011	----	-----	-----	-----
		20060110	RD 2006-501011	20060110
PRIORITY APPLN. INFO.:			RD 2006-501011	20060110
OTHER SOURCE(S):		MARPAT 145:501047		

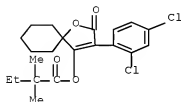
AB Alkoxyated amines may have synergistic acaricidal or insecticidal activity with various insecticides and/or acaricides. A list of these insecticidal and acaricidal compds. is provided. Mixts. containing alkoxyated amines may not only comprise one of the ingredients listed, but may comprise more than one of these active compds., forming for example, three-way or four-way mixts. Such combinations of alkoxyated amines with various active ingredients may have a broader spectrum of acaricidal or insecticidal activity or a higher level of intrinsic acaricidal or insecticidal activity than the active ingredients alone, i.e., there may be a synergistic effect. Such synergism can be tested using standard insecticide or acaricide assays.

IT 148477-71-8D, Spirodiclofen, mixts. with alkoxyated amines

RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)  
(synergistic acaricidal and insecticidal combinations)

RN 148477-71-8 HCAPLUS

CN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)



L15 ANSWER 12 OF 12 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:54985 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 142:129081

TITLE: Use of oxaspirodecenyl butanoate derivative as acaricide

INVENTOR(S): Fischer, Reiner; Brueck, Ernst

PATENT ASSIGNEE(S): Bayer Cropscience Aktiengesellschaft, Germany

SOURCE: PCT Int. Appl., 16 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005004605	A1	20050120	WO 2004-EP7225	20040702
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10331674	A1	20050210	DE 2003-10331674	20030714
AU 2004255427	A1	20050120	AU 2004-255427	20040702
EP 1648231	A1	20060426	EP 2004-740580	20040702
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
CN 1822766	A	20060823	CN 2004-80020075	20040702
BR 2004012586	A	20060919	BR 2004-12586	20040702
CN 101103722	A	20080116	CN 2007-10140727	20040702
JP 2009513540	T	20090402	JP 2006-519802	20040702
KR 2006037334	A	20060503	KR 2006-700577	20060110
IN 2006CN00145	A	20070629	IN 2006-CN145	20060112
MX 2006000521	A	20060330	MX 2006-521	20060113

10/563,803

6/24/09

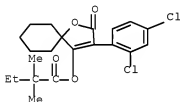
NO 2006000351	A	20060123	NO 2006-351	20060123
US 20070015825	A1	20070118	US 2006-563803	20060628
PRIORITY APPLN. INFO.:			DE 2003-10331674	A 20030714
			CN 2004-80020075	A3 20040702
			WO 2004-EP7225	W 20040702

AB 2,2-Dimethyl-3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl butanoate (I) is useful for controlling acarids in hops, kiwi, berries, nuts, coffee, tropical fruits, spices and conifers. Thus, I (240 SC) at 0.0048%/ha, 21 days after treatment, was 93% effective (according to Abbott) in controlling Tetranychus urticae in hops.

IT 148477-71-8  
 RL: AGR (Agricultural use); BSU (Biological study, unclassified); BIOL (Biological study); USES (Uses)  
 (as acaricide for use on hops, fruits and nuts, coffee, spices, and conifers)

RN 148477-71-8 HCAPLUS

CN Butanoic acid, 2,2-dimethyl-, 3-(2,4-dichlorophenyl)-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

## SEARCH HISTORY

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(FILE 'HOME' ENTERED AT 13:34:56 ON 24 JUN 2009)

FILE 'HCAPLUS' ENTERED AT 13:35:11 ON 24 JUN 2009

E FISCHER REINER/AU  
L1 260 SEA ABB=ON "FISCHER REINER"/AU  
E BRUCK ERNST/AU  
L2 2 SEA ABB=ON "BRUCK ERNST"/AU  
L3 0 SEA ABB=ON L1 AND L2  
L4 262 SEA ABB=ON L1 OR L2  
L5 0 SEA ABB=ON L4 AND ?ACARIDE?  
L6 0 SEA ABB=ON L1 AND ?ACARIDE?  
L7 4 SEA ABB=ON L1 AND (?DICHLOROPHENYL? AND ?OXASPIRO?)  
SELECT RN L7 1-4

FILE 'REGISTRY' ENTERED AT 13:37:17 ON 24 JUN 2009

L8 196 SEA ABB=ON (126-11-4/BI OR 129752-86-9/BI OR 13482-22-9/BI OR  
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FILE 'HCAPLUS' ENTERED AT 13:37:34 ON 24 JUN 2009

L9 4 SEA ABB=ON L7 AND L8

FILE 'REGISTRY' ENTERED AT 13:39:24 ON 24 JUN 2009

L10 1 SEA ABB=ON 148477-71-8 /RN  
L11 STRUCTURE 148477-71-8  
L12 7 SEA SSS SAM L11  
L13 87 SEA SSS FUL L11

FILE 'HCAPLUS' ENTERED AT 13:40:14 ON 24 JUN 2009  
L14 223 SEA ABB=ON L10 OR L13  
L15 12 SEA ABB=ON L14 AND ?ACARID?

FILE HOME

FILE HCAPLUS

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FILE COVERS 1907 - 24 Jun 2009 VOL 150 ISS 26  
FILE LAST UPDATED: 23 Jun 2009 (20090623/ED)  
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Apr 2009  
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Apr 2009

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

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FILE REGISTRY

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STRUCTURE FILE UPDATES: 22 JUN 2009 HIGHEST RN 1159446-15-7  
DICTIONARY FILE UPDATES: 22 JUN 2009 HIGHEST RN 1159446-15-7

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